

Read this Owner's Manual thoroughly before operating the equipment. Keep it with the equipment at all times. Replacements are available from Thern, Inc., PO Box 347, Winona, MN 55987, 507-454-2996. www.thern.com



ORIGINAL TEXT

Owner's Manual

For A28737 RADIO KIT

1.1 OPERATION

- To turn on the transmitter, Press and hold E-STOP button for at least 2 seconds until both the red and green LEDs flash, then release.
- 1.1.2 While running, the E-STOP output will normally be high. A short press of the E-STOP button will turn off this output, and disable the other outputs. This status will be maintained until the RESET button is pressed, at which point the E-STOP output will turn back on, and the other outputs will be enabled again.
- The IN and OUT outputs cannot both be active at the same time.
- 1.1.4 The green LED on the receiver will constantly blink while connected to the transmitter.
- There are red and green LEDs both on the keypad of the transmitter and inside the receiver case. The green LED will blink 2 times per second when the transmitter and receiver are communicating. It will blink 1 time per second if there is no communication (i.e. no power to the receiver. The transmitter's red LED blinks 1 time per second if the battery is low and needs to be changed.)
- 1.1.6 The IN,OUT buttons on the receiver are only functional if the transmitter is turned off, or out of range. To enable these buttons press and hold both buttons for 2 seconds. The buttons will automatically disable after 15 seconds of non use.

1.2 SLEEP TIME

The transmitter is designed with a power saving feature which turns the transmitter off after 15 minutes if no buttons are pressed irrespective of receiver status. This feature can be changed using the following procedure:

- On the transmitter, press and hold E-STOP, IN and OUT buttons. The LEDs will blink once per second.
- 1.2.2 Press one of the following buttons to adjust the sleep time:
 - $_{\rm a}$ IN = 15 min
 - $OUT = 30 \min$
 - RESET = Sleep disabled
- 1.2.3 Sleep programming complete.

1.3 SYNCHRONIZING TRANSMITTER AND RECEIVER

Each transmitter and receiver pair is synchronized together at the factory. If a new transmitter is needed, synchronizing is required. Use the following procedure:

- 1.3.1 Turn both transmitter and receiver off.
- With the transmitter off, press and hold E-STOP button for 10 seconds. Both LEDs start blinking.
- 1.3.3 Turn on the receiver.
- 1.3.4 Wait for a few seconds until only the green LED begins to blink rapidly on the transmitter. The green LED on the receiver should start blinking as well.
- 1.3.5 Teach complete.

1.4 CLONING TRANSMITTERS

AWARNING

ONLY ONE TRANSMITTER CAN BE ON AT A TIME, THEY CANNOT BE USED SIMULTANEOUSLY - USE WITH CAUTION

Occasionally, it is desirable to have more than one transmitter work with a single receiver. This is accomplished by a process called cloning. Cloning allows an additional transmitter (B) to have the same ID code as the original transmitter (A). If this feature is desired, use the following procedure:

- 1.4.1 Make sure both transmitters and the receiver are turned off.
- On Transmitter A, press and hold E-STOP button for 10 seconds until LEDs blink, then release. Green and red LEDs will blink together at this point.
- On Transmitter B, press and hold E-STOP, OUT, and RESET buttons simultaneously until both LEDs start to blink.
- 1.4.4 Wait for few seconds until the green LED starts to blink on transmitter A and transmitter B.
- 1.4.5 Turn both of the transmitters off.
- 1.4.6 Synchronize one of the transmitters to the receiver using SYNCHRONIZING TRANSMITTER AND RECEIVER instructions.

- If the cloning feature has been invoked and is no longer desired, the ID code of one of the transmitters needs to be changed. This will unclone the transmitters. If this is desired, use the following procedure:
- ^a Make sure both transmitters and the receiver are turned off.
- b Press and hold E-STOP, IN, OUT, and RESET buttons simultaneously until both LEDs start to blink, then release.
- c Press any button again to select a new ID.
- d Uncloning complete. Follow the SYNCHRONIZING TRANSMITTER AND RECEIVER procedure above to link the uncloned transmitter to a new receiver.

1.5 SPECIFICATIONS

- 1.5.1 RF: 2.4GHz FHSS 100mW.
- 1.5.2 Temperature: Receiver: -40 to +85°C Transmitter: -20 to 60°C.
- 1.5.3 Output Rating: 5A each (sourcing) 10A system maximum.
- 1.5.4 Encapsulated electronics inside receiver.
- 1.5.5 Power transmitter: 3.7V Lithium Polymer.
- 1.5.6 Battery life: 30-40 hours.

NOTE: This machine is designed to satisfy the functional electrical needs for an emergency stop circuit; to remove power upon an event. While the push button for the emergency stop provides suitable electrical functionality, the size does not allow for use of an approved standard operator capable of meeting exact mechanical and color requirements listed in harmonized standards.

NOTE: This manual is for the wireless control only. Reference the winch manual for additional information of the winch and other supplied controls.

10 A FUSE 9 TO 30 VOLT RED POWER 9-30V GROUND WHITE COMMON 36" GREEN E-STOP OUTPUT IN OUTPUT OUT OUTPUT LOAD

2.0 PARTS LIST AND CPOMPONENTS

P/N: A28507 RECEIVER, 3 OUTPUTS P/N: A28506 TRANSMITTER, MICRO, 4 BUTTON

P/N: A28508 CHARGER P/N: A28509 WRIST STRAP

2.1 TROUBLESHOOTING & ERROR CODES **ERROR CODES**

RECEIVER ERROR CODE CHART

ERROR CODE	PROBABLE CAUSE
1	LOW BATTERY
2	RF COMMUNICATION PROBLEM
3	E-STOP OUTPUT ERROR
4	IN OUTPUT ERROR
5	OUT OUTPUT ERROR

ERROR CODE NUMBER IS THE NUMBER OF RED LIGHT BLINKS BETWEEN EVERY PAUSE.

TRANSMITTER ERROR CODE CHART

ERROR CODE	PROBABLE CAUSE
1	LOW BATTERY

ERROR CODE NUMBER IS THE NUMBER OF RED LIGHT BLINKS BETWEEN EVERY PAUSE.



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